CLAIMS

What is claimed is:

1. An internal combustion engine with a piston cooling system, comprising:

a crankcase forming at least one cylinder;

a piston disposed in the at least one cylinder;

a crankshaft disposed in the crankcase; and

a connecting rod assembly connected to the piston and to the crankshaft, where the connecting rod assembly forms a channel, and where lubrication fluid flows through the channel and sprays on the piston during engine operation.

2. The internal combustion engine of Claim 1, where the piston has an underside surface, and where lubrication fluid sprays onto the underside surface.

3. The internal combustion engine of Claim 1,

where the connecting rod assembly comprises a connecting rod, a connecting rod bearing, a piston pin, and a piston pin bushing;

where the connecting rod mounts on the crankshaft with the connecting rod bearing between the connecting rod and the crankshaft;

where the connecting rod mounts on the piston pin with the piston pin bushing between the connecting rod and the piston pin; and

where the piston pin connects to the piston.

4. The internal combustion engine of Claim 1,

where the connecting rod bearing forms a bearing groove and a bearing hole, where the bearing groove connects to the bearing hole;

where the connecting rod forms a first conduit and a second conduit, where the first conduit aligns with the bearing hole;

where the piston pin bushing forms a first bushing hole and a second bushing hole, where the first bushing hole aligns with the first conduit, where the second bushing hole aligns with the second conduit; and

where the piston pin forms a piston pin groove connected to the first and second bushing holes.

5. The internal combustion engine of Claim 4, where the first bushing hole and the second bushing hole are 180° apart.

6. The internal combustion engine of Claim 4, where the piston pin groove extends across an entire circumference of the piston pin.

7. The internal combustion engine of Claim 4, where the bearing groove extends across an entire circumference of the connecting rod bearing.

8. The internal combustion engine of Claim 4, where the connecting rod assembly comprises a nozzle connected to the connecting rod, where the nozzle forms a nozzle opening, and where the nozzle opening aligns with the second conduit.

9. The internal combustion engine of Claim 5, where the nozzle is disposed adjacent to a target area on an underside surface of the piston.

10. The internal combustion engine of Claim 4, where the crankshaft forms a supply gallery, and where the bearing groove connects with the supply gallery.

11. A piston cooling system for an internal combustion engine, comprising:

a connecting rod forming a first conduit and a second conduit;

a connecting rod bearing connected to the connecting rod, where the connecting rod bearing forms a bearing groove and a bearing hole, where the bearing groove connects to the bearing hole, where the bearing hole aligns with the first conduit;

a piston pin bushing connected to the connecting rod, where the piston pin bushing forms a first bushing hole and a second bushing hole, where the first bushing hole aligns with the first conduit, where the second bushing hole aligns with the second conduit; and

a piston pin connected to the piston pin bushing, where the piston pin forms a piston pin groove connected to the first and second bushing holes.

12. The piston cooling system of Claim 11, where the first and second bushing holes are 180° apart.

13. The piston cooling system of Claim 11, where the piston pin groove extends across an entire circumference of the piston pin.

14. The piston cooling system of Claim 11, where the bearing groove extends across an entire circumference of the connecting rod bearing.

15. The piston cooling system of Claim 11, further comprising a nozzle connected to the connecting rod, where the nozzle forms a nozzle opening, and where the nozzle opening aligns with the second conduit.

16. A method for cooling a piston in an internal combustion engine, comprising:

channeling lubrication fluid through a connecting rod assembly for a piston; and

spraying the lubrication fluid from the connecting rod assembly onto the piston.

17. The method of Claim 16, where the connecting rod assembly comprises a piston pin, a piston pin bushing, a connecting rod, a connecting rod bearing, and a nozzle.

18. The method of Claim 16, further comprising sweeping a lubrication fluid spray across an underside surface of the piston.

19. The method of Claim 16, further comprising lubricating the connecting rod assembly.

20. The method of Claim 19, further comprising lubricating at least one of a piston pin and a piston pin bushing.